

## on the COVER



A great egret soars majestically above the “River of Grass.”

The Savannas Preserve State Park in St. Lucie County is home to the largest freshwater marsh system on the southeast coast of Florida.



After a muddy hike through the river’s lush floodplain, Marion Hedgepeth reaches the water’s edge. Around this study site, she found numerous cypress seedlings, an encouraging sign that native wetland plants are thriving.

## Up to her knees in work... on the banks of the Loxahatchee River with...

**MARION HEDGEPEETH**  
Senior Environmental Scientist

No one asked Marion Hedgepeth what she thought about getting muddy when she joined the South Florida Water Management District almost six years ago. That’s a good thing, because she might not have chosen to redirect her career from waterways to wetlands.

Twenty years ago, Hedgepeth was a fisheries scientist for the then Florida Department of Natural Resources. She worked on – and in – the Loxahatchee River assessing water quality, fish populations and fishery habitat loss.

Today, Hedgepeth works beside the river as a senior environmental scientist for the District. She studies the trees, shrubs and smaller plants that line the Loxahatchee and its surrounding floodplain. In partnership with researchers from the Florida Park Service, University of Florida and the U.S. Geological Survey, Hedgepeth is working to evaluate and improve the river’s ecosystem.

Her studies have helped understand impacts of flood control, starting when drainage canals were built in the 1950s. The Loxahatchee River, particularly the scenic Northwest Fork, lost much of its water as a result. The river’s floodplain, once rich in cypress,

## A DAY AT THE DISTRICT

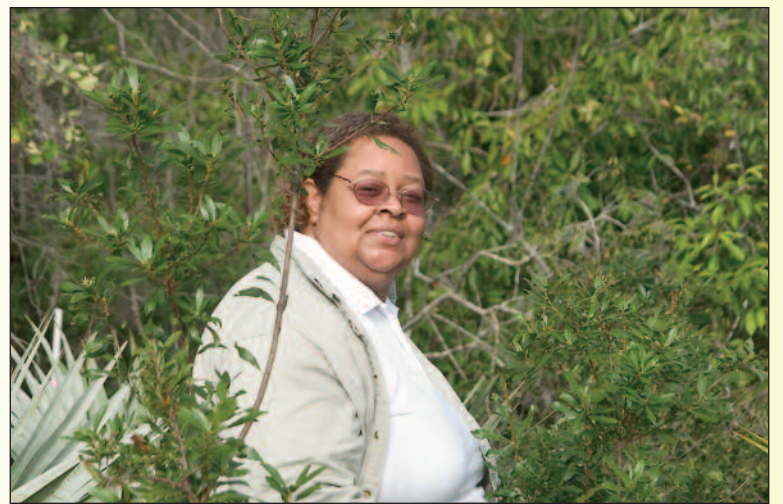
pond apple and other riparian (shoreline) species, became drier. Saltwater from the ocean was able to push inland from the coast, increasing salinity far up river. And logging prior to the 1950s had opened the riverside tree canopy. Together these conditions allowed many non-wetland species – including invasive exotics – to thrive.

In the field, and up to her knees in mud, Hegdepeth spends the day noting desirable and undesirable species at numerous study sites along the river. She especially watches for seedlings and young trees, which indicate how the woodland may be changing. A Park Service intern records her observations, coded in proportions of vegetation types. With a trained eye, Hegdepeth repeatedly points out where red mangroves,

timing, volume and duration of additional water must match the needs of the wetland plant communities. The work of Hedgepeth and her colleagues will help water managers get that right.

“Then we just let Mother Nature go to work,” she explains. “When the floodplain is wetter and saltwater is kept at bay, wetland vegetation will again take over.”

Some of the additional water will come from projects in the Comprehensive Everglades Restoration Plan (CERP). Reservoirs and deep wells will be used to store water during the rainy season and then provide improved flow to the river when conditions are dry. Part of the District’s responsibility to the Loxahatchee is tied to its federal status as a Wild and Scenic River. As one of only two Florida rivers



Surrounded by the plants she is studying, Senior Environmental Scientist Marion Hedgepeth frequently visits the banks of the Loxahatchee River. Her goal is to identify vegetation changes there that are indicators of ecosystem health.

Brazilian pepper and java plums are growing in places where pond apple, pop ash and ancient cypress once stood in abundance.

The District’s ongoing restoration efforts will eventually change that. Guided in part by vegetation studies, water flow to the Loxahatchee’s Northwest Fork will be increased. However, the

with this significant designation, the Loxahatchee’s flow and floodplain must be protected by law.

Happily, mud is no obstacle to this environmental scientist dedicated to this river. That’s certainly a good thing, because as the impacted wetlands are restored, there is sure to be a lot more.

## Find Freddy! Where in the District is Freddy?

### CLUES:

- Freddy the Friendly Alligator makes a “celebrity” appearance at one of the many community and charity events he participates in every year.
- While this particular event boasts more than 1 million worldwide participants, the annual local event is the largest in Florida and takes place in a beautiful, palm tree-lined, waterfront setting.
- Freddy’s vibrant green and yellow outfit is a striking contrast to the vast sea of pink worn by the other 19,000+ participants.
- The South Florida Water Management District had the largest team entry for a government agency and donated more than \$8,000.

*Give up?* The answer is on the back page.

